

From wang!elf.wang.com!ucsd.edu!info-hams-relay Thu Mar 28 20:09:04 1991 remote  
from tosspot  
Received: by tosspot (1.64/waf)  
via UUCP; Thu, 28 Mar 91 21:01:31 EST  
for lee  
Received: from somewhere by elf.wang.com  
id aa23014; Thu, 28 Mar 91 20:09:03 GMT  
Received: from ucsd.edu by relay1.UU.NET with SMTP  
(5.61/UUNET-shadow-mx) id AA05743; Thu, 28 Mar 91 14:18:23 -0500  
Received: by ucsd.edu; id AA17025  
sendmail 5.64/UCSD-2.1-sun  
Thu, 28 Mar 91 08:49:47 -0800 for brian  
Received: by ucsd.edu; id AA16991  
sendmail 5.64/UCSD-2.1-sun  
Thu, 28 Mar 91 08:49:37 -0800 for /usr/lib/sendmail -oc -odb -oQ/var/spool/  
lqueue -oi -finfo-hams-relay info-hams-list  
Message-Id: <9103281649.AA16991@ucsd.edu>  
Date: Thu, 28 Mar 91 08:49:36 PST  
From: Info-Hams Mailing List and Newsgroup <info-hams-relay@ucsd.edu>  
Reply-To: Info-Hams@ucsd.edu  
Subject: Info-Hams Digest V91 #248  
To: Info-Hams@ucsd.edu

Info-Hams Digest                      Thu, 28 Mar 91                      Volume 91 : Issue 248

Today's Topics:

                    "Business use" and MARS  
          a few fundamental questions about RF signals  
            Could we put QSL info online?  
            large 110->220 transformers  
            Problems sending input to INFO-HAMS  
            Seeking Advice on SCANNERS... AR2500?  
                    Solar  
            the Freeband below 10 meters (2 msgs)  
TI TMS-3450 Datasheet Needed (Convert Clock to 24 Hour Time)  
TI TMS-3450 Datasheet No Longer Needed  
TS-440 Calibration Cable (Help Needed)  
VHF/UHF antenna design [a mathematical approach]  
            Where are the DX and WAS nets!?!?  
            WRISTWATCH 2m TRANSCEIVER ?  
            written exam for new codeless tech. license

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available

(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

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Date: 28 Mar 91 16:00:51 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: "Business use" and MARS  
To: info-hams@ucsd.edu

Will, regarding your question:

"Is MARS traffic subject to less restrictions regarding content than ordinary or regular ham radio?"

The MARS system operates under a completely different set of rules than the Amateur Radio Service. First of all, the service and frequencies used fall under the "Government" classification of ITU rules and regulations, specifically the Department of Defense rather than the Federal Communications Commission.

MARS operates under different rules set by DOD, not FCC. Business communications ARE PERMITTED in MARS under certain proscribed circumstances. A MARS station operator (as opposed to a person communicating via a MARS station) may not personally use MARS facilities (frequencies, equipment, etc.) to further personal business interests.

In the example you gave, if the husband was in the military or other federal service (e.g. Department of State) and stationed abroad and was carrying on a conversation with his wife via a MARS phone patch concerning the family business, it is o.k. This is a permitted third party conversation where government facilities (MARS stations) are being used by government personnel for communications. Technically, it is no different that having the same conversation go on an Autovon telephone circuit relayed via satellite. It is also why MARS stations are able to operate in countries (e.g. South Korea, Saudi Arabia, etc.) where Amateur Radio third party communications are not permitted. MARS stations in foreign countries, operating from embassies or military bases, are technically operating on U.S. soil and are governed by U.S., not local, law.

Similarly, a purely domestic business communication placing an order for equipment or parts or groceries or even pizza where MARS is engaged in supporting a domestic situation for which DOD has authorized MARS communications support is o.k. A conversation between MARS associates for personal commercial enterprise using a MARS repeater is not o.k.

The litmus test for domestic communications purposes is unit mission objective accomplishment. The unit being supported does not have to be military or even federal - DOD can support state, or local entities, even the Red Cross. For example, a Corps of Engineers team, supported by MARS, in the field shoring up dikes to prevent floods, can order lunch delivered for the team via MARS communications facilities. A Red Cross field unit taking applications for disaster relief could order office supplies via MARS. Feeding the people, obtaining the office supplies is essential to accomplishing mission objective.

You can't do that on ham radio under Amateur Service rules unless the people are under imminent threat of death or destruction of property - which constitutes a state of emergency!

By the same test, a MARS station operator at Ft. Sam X on routine duty could not call a buddy via MARS facilities and ask him to pick up a pizza and bring it to the station - this is a PERSONAL use by the operator for commercial enterprise that is not critical to accomplishing the mission objective of the unit; viz: operate the MARS station. However, if that same MARS station & operator was designated by DOD to continuously support communications for the field Corps of Engineers and/or Red Cross teams, and the operator was not relieved for meals, etc., then his order for pizza is o.k. as he too must eat in order to achieve the unit's mission objective. Clear?

Hope I didn't overkill the reply, Will.

Regards,  
Wayne, Ass't. Training Officer, NYS Army MARS

-----  
Date: 26 Mar 91 15:00:34 GMT  
From: sdd.hp.com!cs.utexas.edu!execu!sequoia!uudell!bigtex!texsun!letni!rwsys!  
kf5iw!k5qwb!lrk@ucsd.edu  
Subject: a few fundamental questions about RF signals  
To: info-hams@ucsd.edu

dil@mace.cc.purdue.edu (Perry G Ramsey) writes:

> In article <9171@plains.NoDak.edu>, kkim@plains.NoDak.edu (kyongsok kim) writ  
> > I wonder if the  
> > same RF signal can travel either through copper wire or through air. In  
> > other words, is there no difference between RF signal (say, for channel  
> > 4) that my TV receives from the air and RF signal (say, for channel 4)  
> > coming from CATV company through cable?  
>  
> None at all, except that one is an electromagnetic wave traveling through  
> the air and the other is an alternating current traveling through a  
> wire.

>

Note that once it gets to your antenna, the channel 4 signal on your antenna cable and the one from the cable company are the same. Now to start a new argument, the cable does not provide magnetic shielding. The cable doesn't radiate the signal only because the currents flowing in the center conductor and the shield are equal and opposite. Thus the two magnetic fields cancel out a short distance from the cable.

-----

73,  
Lyn Kennedy  
1rk@k5qwb.UUCP      1rk%k5qwb@kf5iw.UUCP  
utacfd.utarl.edu!letni!rwsys!kf5iw!k5qwb!1rk  
K5QWB @ N5LDD.#NTX.TX.US  
P.O. Box 5133, Ovilla, TX, USA 75154

----- "We have met the enemy and they are us." Pogo -----

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Date: 28 Mar 91 02:57:10 GMT  
From: orion.oac.uci.edu!ucivax!jarthur!elroy.jpl.nasa.gov!swrinde!zaphod.mps.ohio-state.edu!caen!kuhub.cc.ukans.edu!zeus.unomaha.edu!acmnews@ucsd.edu  
Subject: Could we put QSL info online?  
To: info-hams@ucsd.edu

In article <1991Mar26.093641.47159@cc.usu.edu>, slp9m@cc.usu.edu writes:  
> Information from the W6G0/K6HHD QSL Managers List is currently available on  
> packet clusters and the publishers have said that this will be permitted as  
> long as subscriptions to the List do not drop off. I wonder if it would  
> also be possible to put this info on the net, under the same type of  
> arrangement.  
>  
> Simply posting the List would definitely not be the way to go as it would  
> chew up big time bandwidth and even the budding, young, over enthusiastic  
> DXer who is spending 18 to 20 hours per day on the air and has zero  
> countries confirmed will not use 1% of the information contained in any one  
> issue. The way to go would be a mail based, or even an interactive server.  
> I am not in a position to put such a thing together, but would be willing to  
> volunteer any assistance I am able to render to such a project.  
>

You know that we have a supplemental rec.radio.amateur archive on ftp.cs.buffalo.edu run by bowen@cs.buffalo.edu, don't you? If someone is willing to fetch the list, it could be sent to bowen, who could in turn put the documents in the archives under subdirectory /pub/ham-radio.

> I really do not know if this is even a realistic idea. I would like to see

> some comments from the net. (Also, any other volunteers??)

I'm not really a DX'er or a tester. Besides, I'm already doing the On-Line Elmers Directory. Any volunteers out there? This sounds like a wonderful idea.

>

> #####  
> # Scott E. Parker WA7VYJ # INTERNET: SLP9M@cc.usu.edu #  
> # Center for Atmospheric & Space Sciences # Twisted pair: (801) 750-2975 #  
> # Utah State University # Home: (801) 753-3924 #  
> # Logan, UT 84322-4405 #  
> #####

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Date: 28 Mar 91 15:57:51 GMT  
From: fs7.ece.cmu.edu!o.gp.cs.cmu.edu!andrew.cmu.edu!dh1s+@sei.cmu.edu  
Subject: large 110->220 transformers  
To: info-hams@ucsd.edu

I am moving to Spain and want to bring several appliances (eg: macintosh, fax, blender, stereo).

Power in Spain is 220v/50hz. The appliances are all 110v. Some are labeled 60hz, some are labeled 50/60hz.

I have a couple of questions:

1. I am reluctant to trust my fax and mac to the cheap travel transformers sold at Akbar & Jeff's Luggage Hut. Is there some sort of larger, reliable transformer I can get to plug all (or several) of my appliances into?
2. Can someone recommend a store in New York City (or mailorder) where I can buy such a transformer (for best price)?
3. Is 60Hz going to screw up my 50Hz clock radio? If so, can anything be done about this?

Thanks,  
--Donn H.

-----

Date: 28 Mar 91 09:52:00 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Problems sending input to INFO-HAMS

To: info-hams@ucsd.edu

Since installing two floppy disks and an Adaptec ACB 2050 RLL disk controller, I have had problems booting the machine. Is this due to the high clock rate of 12 MHz, or is there something more sinister at work here? Once booted, the system runs just fine...

- Ya'akov N. Miles,  
<MULTI@TRIUMFcl.bitnet>

ps: The floppy disks are quad density Tandon TM65-4 and seem to work OK without the Adaptec ACB 2050. Should I reformat all disks involved?

-----  
Date: 26 Mar 91 17:26:05 GMT  
From: ucselx!usc!cs.utexas.edu!milano.sw.mcc.com!uudell!bigtex!texsun!newstop!  
west!L1-A.West.Sun.COM!flloyd@ucsd.edu  
Subject: Seeking Advice on SCANNERS... AR2500?  
To: info-hams@ucsd.edu

Hi gang!

I'm looking for advice on scanners - here's what I'm looking for:

Continuous Coverage - 30 Mhz - 1300 Mhz  
FM, AM, WFM, selectable for any frequency.  
Lots of memory channels.  
Cost - not more than \$500

So far, I've come up with the AOR model AR2500 Is it any good?  
Any advice about this or any other rig which meets my specs would be appreciated.

-fred AA7BQ

--  
| Fred Lloyd AA7BQ Fred.Lloyd@West.sun.com |  
| Sun Microsystems, Inc. ...sun!flloyd |  
| Phoenix, AZ (reality -- what a concept!) (602) 275-4242 |

-----  
Date: 28 Mar 91 09:17:18 GMT  
From: swrinde!elroy.jpl.nasa.gov!usc!rpi!clarkson!manninfj@ucsd.edu  
Subject: Solar

To: info-hams@ucsd.edu

Path: spiff.soe!gomer  
Date: 28 Mar 91 08:38:56 GMT  
Message-ID: <gomer.670149536@spiff.soe>  
Newsgroups: rec.radio.amateur.misc  
Distribution: world  
Subject: Solar Flux Index & WWV  
Keywords: WWV

Could someone please start posting the Solar Flux Index reports from WWV again. Dave Bray, K2LMG, and I are going to try to keep a database of the trend daily. Some days (yesterday being a prime example) neither of us are able to pick WWV out from the mess. Also if someone has a set for any time period and would be willing to mail it to us that would also be appreciated.

'73!

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Paul Kronenwetter - N2KIQ	Amateur Packet: N2KIQ@KA2JXI.NY.USA
kronenpj@clutx.clarkson.edu	N2KIQ@BBSJXI.NEDA.USA
kronenpj@clutx.bitnet	Snail Mail: Clarkson University
Voice:315-268-4134 St Lawrence Cty:	Box 6942
Buffalo: 146.910-  444.15+ 146.910-	Potsdam, NY
146.580  444.000+  \\/\ 146.580	14699-6942

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-Archangel  
manninfj@clutx.clarkson.edu

The opinions expressed herein are my own. In the near future they will become facts, and in an eon or so they will become law.

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Date: 27 Mar 91 14:58:09 GMT  
From: hpfcso!ron@hplabs.hpl.hp.com  
Subject: the Freeband below 10 meters  
To: info-hams@ucsd.edu

Re: "Free (phtooey!) banders"

MONITORING TIMES has an article on FCC's renewed interest in enforcement of CB regulations in the April issue. (No, it doesn't appear to be a joke) The article describes going on a transmitter hunt in the Norfolk/Virginia Beach area -- staged out of the Norfolk Field office.

Ron  
NWOU

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Date: 28 Mar 91 02:07:51 GMT  
From: pa.dec.com!decabo.enet.dec.com!anarky.enet.dec.com!brewer@decwrl.dec.com  
Subject: the Freeband below 10 meters  
To: info-hams@ucsd.edu

In article <50958e3c.20b6d@apollo.HP.COM>, hays@apollo.HP.COM (John Hays) writes...  
>In article <z65f9vg@rpi.edu> glickman@aix01.aix.rpi.edu (Joel H Glickman) writes:  
>  
>Maybe we should get unattended automatic packet authorized for 28.000 to  
>28.100 Mhz. (up to 9600 baud?) --- that would put up a nice gaurd band  
>to contain the "freebanders" ????

Interesting that you mention packet... listen around 27.5-27.9 carefully, and you'll hear quite a bit of packet freeband activity. I monitored some european BBS activity, as well as a good number of US stations in qso at 300 baud. Also a bit of bootleg rtty.

I hear that the FCC is currently in the midst of an enforcement blitz on commercial tower painting enforcement. Seriously!

I guess they stand better chance of catching those errant towers as they are not nearly as fast-moving as those freebanders!  
/john

-----  
Date: 27 Mar 91 13:58:46 GMT  
From: hayward@gargoyle.uchicago.edu  
Subject: TI TMS-3450 Datasheet Needed (Convert Clock to 24 Hour Time)  
To: info-hams@ucsd.edu

In article <1991Mar26.173133.3475@netcom.COM> edg@netcom.COM (Ed Greenberg) writes:  
:I have a digital alarm clock (one with 2 inch digits) that has, as it's  
:only IC, a TMS-3450 Integrated Circuit. I would like to make a  
:modification to the clock to display 24 hour time. (Why would a ham  
:need something like that? :-)  
:  
:I called TI and they can't provide a datasheet! They state that the



:it's an "international chip". I

Yes, isn't this a bummer.

I tried to do the same thing a few years ago, figuring that most of these chips were made for 12/24 display, but the distributor (who probably just bought the stuff from the Pacific rim) was no help. I finally gave up, after trying several combinations.

This month, Radio Shack has a 12/24 clock on sale for only \$13. Even at that, it is over-priced, but probably the best deal you will get if you can't get the data on the chip.

Peter

--

Peter B. Hayward          University of Maine          WX9T

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Date: 27 Mar 91 21:43:08 GMT  
From: vsi1!daver!dlb!netcom!edg@ames.arpa  
Subject: TI TMS-3450 Datasheet No Longer Needed  
To: info-hams@ucsd.edu

See above. The clock in question has a partial tens digit in the hours field, so converting it for 24 hour operation is silly. Oh well, and I hope nobody put lots of effort into helping me out. I appreciate all efforts, and will cancel the original article.

Thanks es 73,

-edg

--

Ed Greenberg          | Home: +1 408 283 0184 | edg@netcom.com  
P. O. Box 28618          | Work: +1 408 764 5305 | CIS: 76703,1070  
San Jose, CA 95159      | Fax: +1 408 764 5003 | WB2GOH @ N6LDL.CA.USA

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Date: 28 Mar 91 16:26:25 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: TS-440 Calibration Cable (Help Needed)  
To: info-hams@ucsd.edu

Gary Bourgois flash@lopez (rutgers!sharkey!lopez!flash) :  
if your TS-440 is anything like my TS-430 (and I suspect it is), you can use a short piece of test wire with a miniature alligator clip on each end and accomplish the objective which is to feed the local oscillator signal from one board to another in order to zero beat it against WWV. There is nothing

special about the wire - it is normal hook-up wire, not shielded.

Better yet, buy the Service Manual from Kenwood (about \$18-22), use a counter and set all the internal frequencies according to the alignment instructions. You will be much happier and more accurate than using the WWV beat method.

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Date: 26 Mar 91 15:22:28 GMT  
From: sdd.hp.com!cs.utexas.edu!execu!sequoia!uudell!bigtex!texsun!letni!rwsys!  
kf5iw!k5qwb!lrk@ucsd.edu  
Subject: VHF/UHF antenna design [a mathematical approach]  
To: info-hams@ucsd.edu

abeals@Autodesk.COM (Anything you don't mean can't hurt you) writes:

> It's one thing to know "This antenna has 19dB gain at 444.075 MHz". It  
> is another thing to be able to calculate the gain of an antenna that you  
> haven't built yet.

But when you get it built, it won't have this gain anyway. Antennas are somewhat of a black art. Build it and then tweak it up with actual measurements if you want one that's really good.

>

> Andrew Scott Beals

KC6S

> abeals@autodesk.com

> Marboro: War Ich Rindveh bin.

-----

73,  
Lyn Kennedy  
lrk@k5qwb.UUCP      lrk%k5qwb@kf5iw.UUCP  
utacfd.utarl.edu!letni!rwsys!kf5iw!k5qwb!lrk  
K5QWB @ N5LDD.#NTX.TX.US  
P.O. Box 5133, Ovilla, TX, USA 75154

----- "We have met the enemy and they are us." Pogo -----

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Date: 27 Mar 91 19:16:48 GMT  
From: sdd.hp.com!news.cs.indiana.edu!cs.widener.edu!dsinc!cdin-1!ki4pv!ka3ovk!  
albers@ucsd.edu  
Subject: Where are the DX and WAS nets!?!?  
To: info-hams@ucsd.edu

Where are the DX and WAS nets? I am looking for info on nets which meet regularly with people interested in DXing and chasing paper like DXCC and

WAS. I know there are nets like 'Snookie's Net' around, but when/where do they meet? What on-the-air phone and cw nets do you check in to?

If there is enough interest, I would be willing to keep a database up and make monthly posting of net listings, but I need info from you guys!

Jon

--

| Jon Albers, IRS, Information Systems Management, Support and Installation. |  
| Office Symbols: ISM:S:S:SI voice: (202/FTS)535-3729 Packet: KA30VK@N4QQ |  
| UUCP:(media|teemc|tcsc3b2|ki4pv)!ka3ovk!albers ARPA: JALBERS@SIMTEL20 |

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Date: 28 Mar 91 15:51:38 GMT  
From: pmafire!@uunet.uu.net  
Subject: WRISTWATCH 2m TRANSCEIVER ?  
To: info-hams@ucsd.edu

How close are we?! I presently own an Icom 2sa, which does an incredible amount of stuff for it's petite size! In fact, with the battery removed it is smaller than my tiny Motorola external speaker mic! I also live in the land of multiple 9000 ft. repeaters - talk about being spoiled! 100 mw on 2m is usually more than enough! Is it possible to buy an I.C. that would allow construction of a 100 mw 2m wristwatch rig? Has anyone else contemplated such a dream?? Is ANY manufacturer of Ham equip. thinking along similar lines, or have I just been watching too many 007 re-runs??

Jeff B. Later WB7TZA  
jeffl@pmafire.inel.gov

\*\*\*\*\*Opinions expressed are mine, and mine alone.....\*\*\*\*\*

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Date: 28 Mar 91 15:00:57 GMT  
From: sdd.hp.com!hp-col!col!bobw@ucsd.edu  
Subject: written exam for new codeless tech. license  
To: info-hams@ucsd.edu

>/ col:rec.radio.amateur / kkim@plains.NoDak.edu (kyongsok kim) / 10:45 am Mar 27, 1991 /

>

> i recently started reading this news group and please forgive me  
>if this question was asked before. i would like to know which elements

>of the written exam are needed for the new codeless tech. license.

>

> i guess element 2 (written exam for novice), element 3a (for  
>tech), and probably some other elements are required.

Just Element 2 ("Novice exam") and Element 3A ("Technician Exam")  
and nothing else.

>

> another related question. as i understand it, in the past, there  
>was a privileges hierarchy among novice-tech-gen-adv-ama extra licenses  
>in the sense that the privileges of next higher level license are a  
>proper superset of those of the next lower level license. then, how does  
>the codeless tech. fit in this privileges hierarchy?

It doesn't. Until the Tech license holder passes the 5 WPM Morse Code  
test, he doesn't get the high frequency novice privileges.

-----

Date: 28 Mar 91 04:04:44 GMT

From: bloom-beacon!snorkelwacker.mit.edu!hsdndev!wuarchive!cs.utexas.edu!oakhill!  
nddsun1!waters@ucbvax.berkeley.edu

To: info-hams@ucsd.edu

References <21416@shlump.nac.dec.com>, <941@nddsun1.sps.mot.com>,  
<1991Mar27.173505.12340@news.arc.nasa.gov>waters

Subject : Re: Straight keys vs. iambic

In article <1991Mar27.173505.12340@news.arc.nasa.gov> trey@tgvl.com (Trey Garlough)  
writes:

}I guess it depends what is meant by "high speed operators." It takes  
{a bit of effort to send 40 WPM with a keyer, but there are a lot of  
{people out there doing it. It takes a lot of effort to send 50 WPM  
{with a keyer, and even those who can send that fast have trouble  
{sustaining those speeds. On the other hand, it is virtually effortless  
{to send 50 WPM with a keyboard, especially if you start "typing ahead"  
{while the other station is still transmitting.

Personally I find it a lot easier to sustain 40 wpm with a good iambic  
keyer than with a keyboard. I may be biased some since most of my high  
speed CW operation has been DXing and contesting rather than extended  
ragchews. In that kind of operation a "memory keyer" with pre stored  
responses is much more useful than a keyboard if only because you need  
fewer keystrokes.

}My observation has been that most of the \*really\* fast CW operators  
{use keyboards to send and receive by ear.

About 80% of the 35 wpm plus operators I have heard are from countries like the USSR where CW keyboards are VERY hard to come by. I suspect our samples are simply different though.

I still don't understand why one wouldn't use RTTY or AMTOR in that case though. Oh well.

Mike AA4MW

-----  
Date: 28 Mar 91 07:37:06 GMT  
From: math.fu-berlin.de!opal!unido!fauern!NewsServ!buettnebuunet.uu.net  
To: info-hams@ucsd.edu

References <21416@shlump.nac.dec.com>, <941@nddsun1.sps.mot.com>,  
<1991Mar27.173505.12340@news.arc.nasa.gov>  
Subject : Re: Straight keys vs. iambic

In article <1991Mar27.173505.12340@news.arc.nasa.gov> trey@tgv.com (Trey Garlough) writes:

>  
>I guess it depends what is meant by "high speed operators." It takes  
>a bit of effort to send 40 WPM with a keyer, but there are a lot of  
>people out there doing it. It takes a lot of effort to send 50 WPM  
>with a keyer, and even those who can send that fast have trouble  
>sustaining those speeds. On the other hand, it is virtually effortless  
>to send 50 WPM with a keyboard, especially if you start "typing ahead"  
>while the other station is still transmitting.  
>  
>My observation has been that most of the \*really\* fast CW operators  
>use keyboards to send and receive by ear.  
>--  
>Trey Garlough, WN4KKN

There are a number of high speed telegraphy clubs over here in Europe - probably not very well-known in the states. These are HSC (High Speed Club), VHSC (Very ..), SHSC (Super ..) and EHSC (Extra ..). These clubs promote fast telegraphy communication and each of them has a different entry level.

For VHSC you have to prove your abilities by means of QSL cards from other VHSC members for QSOs made at or above 40 wpm. No keyboards or decoders allowed. Those QSOs have to take at least 30 minutes. Requirements for SHSC and EHSC are virtually the same but speed limits are 50 wpm and 60 wpm respectively.

VHSC has a membership of well over 250 world wide. So there obviously is a good number of people being able to send and receive those speeds without keyboards and decoders.

Keyers used are kind of special. Most of the really fast guys use iambic keying and no mechanics but sort of a sensor so there are no moving parts. Besides, there is a difference with iambic keyers: Those with a dot memory and those without. And there is a difference with dot memories too: dynamic and static. The real cracks use dynamic dot memory here.

73 Ben, DL6RAI (HSC #1133, VHSC #114)

-----  
Date: 28 Mar 91 00:28:35 GMT  
From: usc!rpi!bu.edu!m2c!jjmhome!km3t@ucsd.edu  
To: info-hams@ucsd.edu

References N6TQS, 415-688-8269), <9103270633.AA08679@ucsd.edu>  
Subject : Re: ICOM AG-25 and AG-35 PREAMPS

In article <9103270633.AA08679@ucsd.edu>, faunt@cisco.COM (Doug Faunt N6TQS 415-688-8269) writes:

>  
> I have a question for the net about the preamp. Is it possible to  
> predict its noise figure just by knowing that it's got a 3SK121 in it?  
> Or does anyone know how well it works? Or if necessary, how it could  
> be improved?

I couldn't find my reference here on the 3SK121, but you should be able to "ballpark" the noise figure of the preamp. The reason it's only a ballpark estimate is you need to look at the actual design to determine how input and output matching is done. Both have an effect on overall noise figure of the preamp.

If someone has a data book with this device in it, then they should be able to tell you what the device is capable of. You will probably be given the noise figure at 100 MHz or some other frequency, probably not exactly at 144 MHz, unless they give you a curve of NF vs. frequency. But even a 100 MHz value will give you some idea.

If this preamp is like some of the other ones produced by the major transceiver manufacturers, then I bet the NF is in the 1-2 dB range. Of course, this should be good enough for any terrestrial application since antenna noise at 144 MHz is usually around 2-3 dB or so, depending on the local noise your antenna "sees". For EME, however, your antenna is pointing away from the warm Earth and a very low-noise preamp is a

real benefit.

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End of Info-Hams Digest

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